

IN THE CLAIMS:

*Please amend the claims as follows:*

1. *(currently amended)* ~~Method~~ A method for providing at least one phase-characterizing parameter for speech processing operable with hybrid speech coders and hybrid speech decoders, comprising:

- obtaining characteristics of a preceding frame coded according to a waveform matching speech coding; said preceding frame according to said waveform matching speech coding being immediately preceding in time to a succeeding frame according to a parametric speech coding

characterized by

- deriving said at least one phase-characterizing parameter for processing said succeeding frame according to said parametric speech coding from said obtained characteristics;

wherein said at least one phase-characterizing parameter is employable to prevent misalignment of said frames.

2. *(currently amended)* ~~Method~~ The method according to claim 1, wherein said speech processing is a speech encoding operation.

3. *(currently amended)* ~~Method~~ The method according to claim 1, wherein said speech processing is a speech decoding operation.

4. *(currently amended)* ~~Method~~ The method according ~~anyone of the preceding claims to~~ claim 1, wherein said step of obtaining characteristics of said preceding frame according to said waveform matching speech coding comprises:

- determining positions of at least one pulse of said preceding frame according to said waveform matching speech coding; and
- determining a position of a last pulse of said at least one pulse.

5. *(currently amended)* ~~Method~~ The method according to claim 4, wherein said at least one pulse is at least one pitch pulse.

6. *(currently amended)* ~~Method~~ The method according to claim 4 ~~or claim 5~~, wherein said step of obtaining characteristics of said preceding frame according to a waveform matching speech coding comprises:
  - determining a pulse value from the distances between said at least two pulses.
7. *(currently amended)* ~~Method~~ The method according to claim 4 ~~or claim 5~~, wherein said obtaining characteristics of said preceding frame according to a waveform matching speech coding comprises:
  - obtaining a pulse value from an antecedent frame.
8. *(currently amended)* ~~Method~~ The method according to claim 6 ~~or claim 7~~, wherein said at least one phase-characterizing parameter is obtained from said position of said last pulse relative to a size of said preceding frame according to said waveform matching speech coding in relation to said pulse value.
9. *(currently amended)* ~~Method~~ The method according to ~~anyone of the preceding claims~~ claim 1, wherein said at least one phase-characterizing parameter is at least one phase value.
10. *(currently amended)* ~~Method~~ The method according to ~~anyone of the claims 2 to 9~~ claim 2, wherein said determining of said positions comprises:
  - determining average energy values from said preceding frame according to said waveform matching speech coding ~~[[and]]~~
  - evaluating said average energy values in order to determine positions of at least one local maximal energy value, and
  - assigning said positions of said at least one local maximal energy value to said positions of said at least one pulse.
11. *(currently amended)* ~~Method~~ The method according to claim 10, wherein said determining said average energy values comprises the step of:
  - employing a sliding average algorithm in order to determine said average energy values.

12. *(currently amended)* ~~Method~~ A method for detecting a transition misalignment in transition from a preceding frame according to a waveform matching speech coding to a succeeding frame according to a parametric speech coding, said preceding frame according to said waveform matching speech coding being immediately preceding in time to said succeeding frame according to said parametric speech coding, comprising:

- obtaining characteristics of said preceding frame according to said waveform matching speech coding,
- obtaining characteristics of said succeeding frame according to said parametric speech coding, and
- evaluating said obtained characteristics in order to detect said transition misalignment.

13. *(currently amended)* ~~Method~~ The method according to claim 12, wherein said obtaining characteristics of said preceding frame according to said waveform matching speech coding comprises:

- determining positions of at least one pulse from said preceding frame according to said waveform matching speech coding and

- determining a position of a last pulse of said at least one pulse,

and wherein said obtaining characteristics of said succeeding frame according to said parametric speech coding comprises:

- determining positions of at least one pulse from said ~~succeeding frame~~ succeeding frame according to said parametric speech coding and
- determining a position of a first pulse of said at least one pulse,

14. *(currently amended)* ~~Method~~ The method according to claim 13, wherein said pulses are pitch pulses.

15. *(currently amended)* ~~Method~~ The method according to claim 13 ~~or claim 14~~, wherein said evaluating said obtained information comprises:

- determining a distance of said position of said last pulse and said position of said first pulse and
- comparing said distance with a pulse value.

16. *(currently amended)* ~~Method~~ The method according to claim 15, wherein said pulse is obtained by the step of:
- determining said pulse value from distances of said pulses included in said preceding frame according to said waveform matching speech coding.
17. *(currently amended)* ~~Method~~ The method according to claim 15, wherein said pulse is obtained by the step of:
- determining said pulse value from a phase contour of an antecedent frame according to said parametric speech coding.
18. *(currently amended)* ~~Method~~ The method according to ~~anyone of the claims 12 to 17~~ claim 12, wherein said determining of said positions comprises:
- determining average energy values from said frame and
  - evaluating said average energy values in order to determine positions of at least one local maximal energy value and
  - assigning said positions of said at least one local maximal energy value to said positions of said at least one pulse.
19. *(currently amended)* ~~Software~~ A software tool for speech processing, comprising program code portions for carrying out the operations ~~of any one of claims 1 to 18~~ according to claim 1, when said program is implemented in a computer program for executing on a computer, a user terminal or a network device.
20. *(currently amended)* ~~Computer~~ A computer program for speech processing, comprising program code section for carrying out the operations ~~of any one of claims 1 to 18~~ according to claim 1, when said program is run on a computer, a user terminal or a network device.
21. *(currently amended)* ~~Computer~~ A computer program product for speech processing, wherein said computer program product ~~is comprising~~ comprises program code sections stored on a computer readable medium for carrying out the method ~~of any one of claims 1 to 18~~ according to claim 1, when said program product is run on a computer, a user terminal or network device.

22. *(currently amended)* ~~Communication~~ A communication terminal device offering enhanced quality of transmitted speech data comprising a speech encoder including a parametric speech encoding unit, a waveform matching speech encoding unit, and a communication interface for communicating speech encoded data via a mobile communication network, wherein said speech encoder is able to operate the method for providing at least one phase-characterizing parameter for coding a succeeding frame according to a parametric speech coding according to ~~anyone of the claims 1 to 11~~ claim 1.

23. *(currently amended)* ~~Communication~~ A communication terminal device offering enhanced quality of transmitted speech data comprising a speech decoder including a parametric speech decoding unit and a waveform matching speech decoding unit and a communication interface for communicating speech encoded data via a mobile communication network, wherein said speech decoder is able to operate the method for detecting a transition misalignment in transition from a preceding frame according to a waveform matching speech coding to a succeeding frame according to a parametric speech coding according to ~~anyone of the claims 12 to 18~~ claim 12.

24. *(currently amended)* ~~Terminal~~ The terminal device according to claim 23, said speech decoder being additionally able to operate the method for providing at least one phase-characterizing parameter for coding a succeeding frame according to a parametric speech coding according to ~~anyone of the claims 1 to 11~~ claim 1.

25. *(currently amended)* ~~Network~~ A network device offering enhanced quality of transmitted speech data comprising a communication interface for receiving encoded speech data and transmitting encoded speech data and an analyzing unit, said analyzing unit being able to operate the method for detecting a transition misalignment from a preceding frame according to a waveform matching speech coding to a succeeding frame according to a parametric speech coding according to ~~anyone of the claims 12 to 18~~ claim 12.

26. *(currently amended)* ~~Network~~ The network device according to claim 22, said analyzing unit being additionally able to operate the method for providing at least one

phase-characterizing parameter for coding a succeeding frame according to a parametric speech coding according to ~~anyone of the claims 1 to 11~~ claim 1.

27. *(currently amended)* ~~System~~ A system offering enhanced quality of transmitted speech data comprising:

- a first terminal comprising a speech encoder for encoding speech and a communication interface for transmitting encoded speech data,
- a first terminal comprising a speech decoder for decoding said encoded speech data and a communication interface for receiving said encoded speech data,
- an intermediate network device offering enhanced quality of transmitted speech data according ~~the anyone of the claims 25 to 26~~ claim 2.